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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,386	08/21/2001	Bharath Vasudevan	016295.0673	8095

7590

05/12/2005

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EXAMINER

KINDRED, ALFORD W

ART UNIT

PAPER NUMBER

2163

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,386

Applicant(s)

VASUDEVAN ET AL.

Examiner

Alford W. Kindred

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communication: Amendment, filed on 02/22/2005.

This action is made final.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman Amuah, US# 6,438,594 B1, in view of Freeman et al., US# 2001/0049717 A1, and further in view of Williams et al., US# 5,781,908.

As per claims 1-2, Bowman-Amuah teaches "a source subsystem" (see col. 49, lines 34-59 and col. 52, lines 56-59) "a target subsystem, wherein the source node and the target node are communicatively" (see col. 53, lines 15-26) "a repository subsystem" (see col. 56, lines 26-35). Bowman-Amuah does not explicitly teach "wherein the repository subsystem is external to each of the source subsystem and the target subsystem . . . data between the repository subsystem . . .". Freeman et al. teaches "wherein the repository subsystem is external to each of the source subsystem and the target subsystem . . . data between the repository subsystem . . ." (see paragraphs [0301]-[303], [0285] and [0374]). It would have been obvious at the time of the invention for one of ordinary skill in the art to have combined the teachings of Bowman-

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Amuah and Freeman, because using the steps of “wherein the repository subsystem is external to each of the source subsystem and the target subsystem . . . data between the repository subsystem . . .”, would have given those skilled in the art the tools to externally coordinate the communications between various repository and source subsystems. This decreases the processing time of data between the source and target subsystems. Bowman-Amuah does not explicitly teach “wherein the repository subsystem is operable to queue the write statement issued by the source subsystem and deliver the write statement to the target subsystem.” Williams et al. teaches “wherein the repository subsystem is operable to queue the write statement issued by the source subsystem and deliver the write statement to the target subsystem” (see col. 7, lines 39-50). It would have been obvious at the time of the invention for one of ordinary skill in the art to have combined the teachings of Bowman and Williams, because using the steps “wherein the repository subsystem is operable to queue the write statement issued by the source subsystem and deliver the write statement to the target subsystem” would have given those skilled in the art the capacity to temporary store write statements for subsequent transmission to various repository systems. This give users the advantage of processing and manipulating replicated data, for transferring purposes, more efficiently.

As per claim 3, this claim is rejected on grounds corresponding to the arguments given above for rejected claim 1 including the following:

--Bowman-Amuah teaches “issue a write statement . . . write statement may be replicated by the target subsystem . . .” (see col. 54, lines 3-40).

As per claims 4 and 8, Bowman-Amuah teaches “the repository subsystem is operable to queue the write statement issued by the source subsystem . . .” (see col. 54, lines 3-45 and col. 73, lines 15-35).

As per claims 5-6, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-3 and are similarly rejected including the following:

--Bowman-Amuah teaches “storage device operable to store data and meta-data and changes thereto in response to the write statement” (see col. 5, lines 14-20 and col. 6, lines 63-67).

As per claims 7 and 21-22, Bowman-Amuah teaches “the data transfer mode is an asynchronous mode” (see col. 53, lines 50-58).

As per claim 9, Bowman-Amuah teaches “wherein the source node is operable to send the write statement to the repository . . . write statement from the repository subsystem” (see col. 54, lines 3-40).

As per claim 10, this claim is rejected on ground corresponding to the arguments given above for rejected claim 9 and is similarly rejected including the following:

--Bowman-Amuah teaches “wherein the target subsystem is able to receive the write statement from the repository subsystem when the target subsystem is able to replicate the write statement” (see col. 53, lines 33-48).

As per claims 11-12, Bowman Amuah teaches “send the write statement to the repository subsystem if the source node receives a choke signal from the target subsystem” (see col. 205, lines 47-55).

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As per claims 13-16 and 18, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 11-12 and are similarly rejected including the following:

-- Bowman-Amuah teaches "a target queue associated with a choke threshold and wherein target subsystem . . . not above the choke threshold" (see col. 205, lines 40-55).

As per claim 17, Bowman-Amuah teaches "a source queue" (see col. 73, lines 14-34)

As per claim 19, Bowman-Amuah teaches "a plurality of repository subsystems" (see col. 57, lines 23-47).

As per claim 20, Bowman-Amuah teaches "wherein each repository queues mirror each other" (col. 73, lines 15-40).

As per claims 23-25, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-4 and are similarly rejected.

As per claims 26-28, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-5 and 20 are similarly rejected including the following:

As per claims 29 and 31, Bowman-Amuah teaches "the target is unable to handle the write statement if the target node cannot handle the write statement" (see col. 54, lines 3-46).

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As per claim 30, Bowman-Amuah teaches “a target queue associated with a choke threshold and operable to queue to the write statement . . .” (see col. 205, lines 47-55).

Response to Arguments

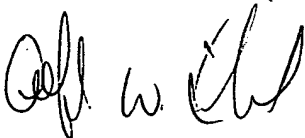
4. Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alford W. Kindred whose telephone number is 571-272-4037. The examiner can normally be reached on Mon-Fri 9:00 am- 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Alford W. Kindred', is positioned above the printed name.

Alford W. Kindred
Patent Examiner
Tech Ctr. 2100